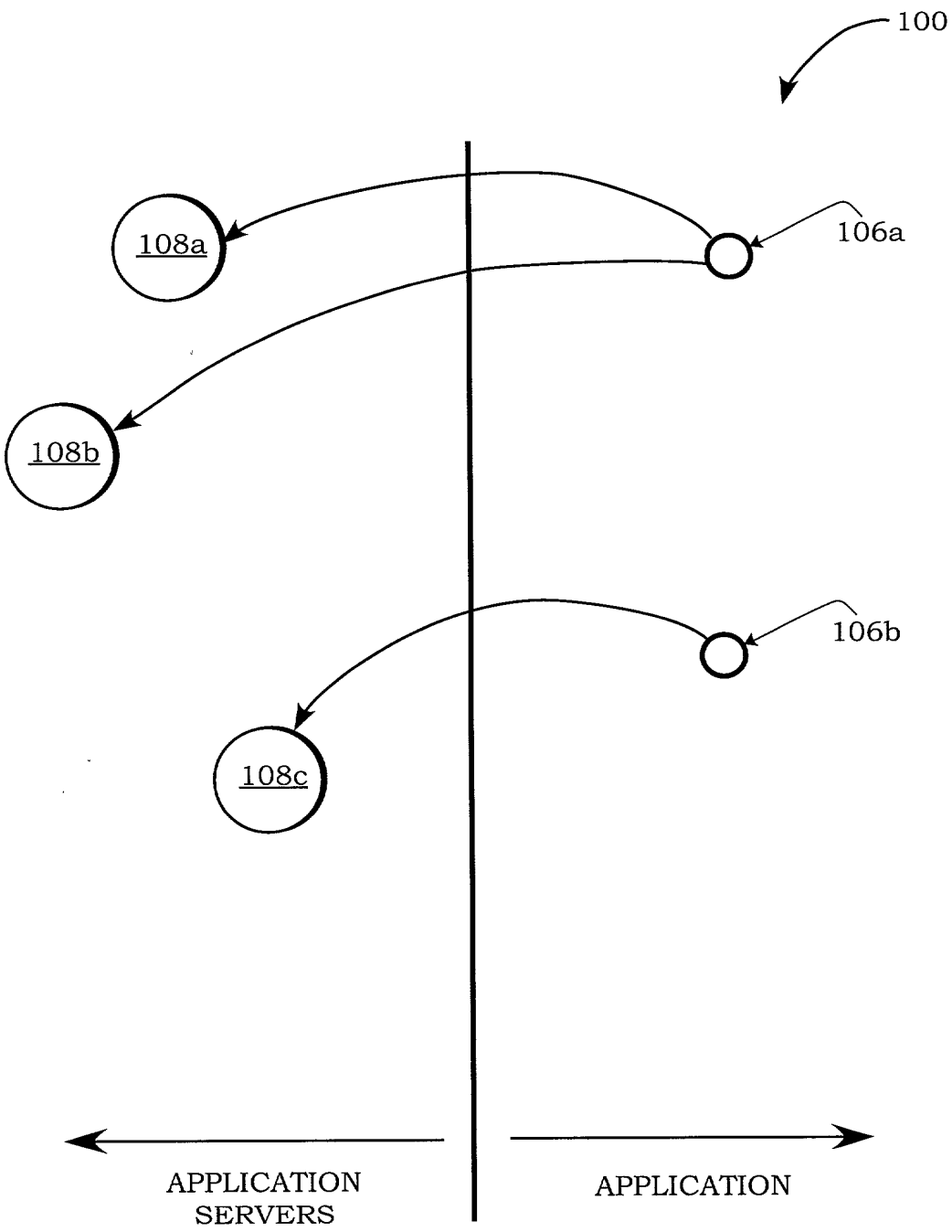

FIG. 1
(Prior Art)

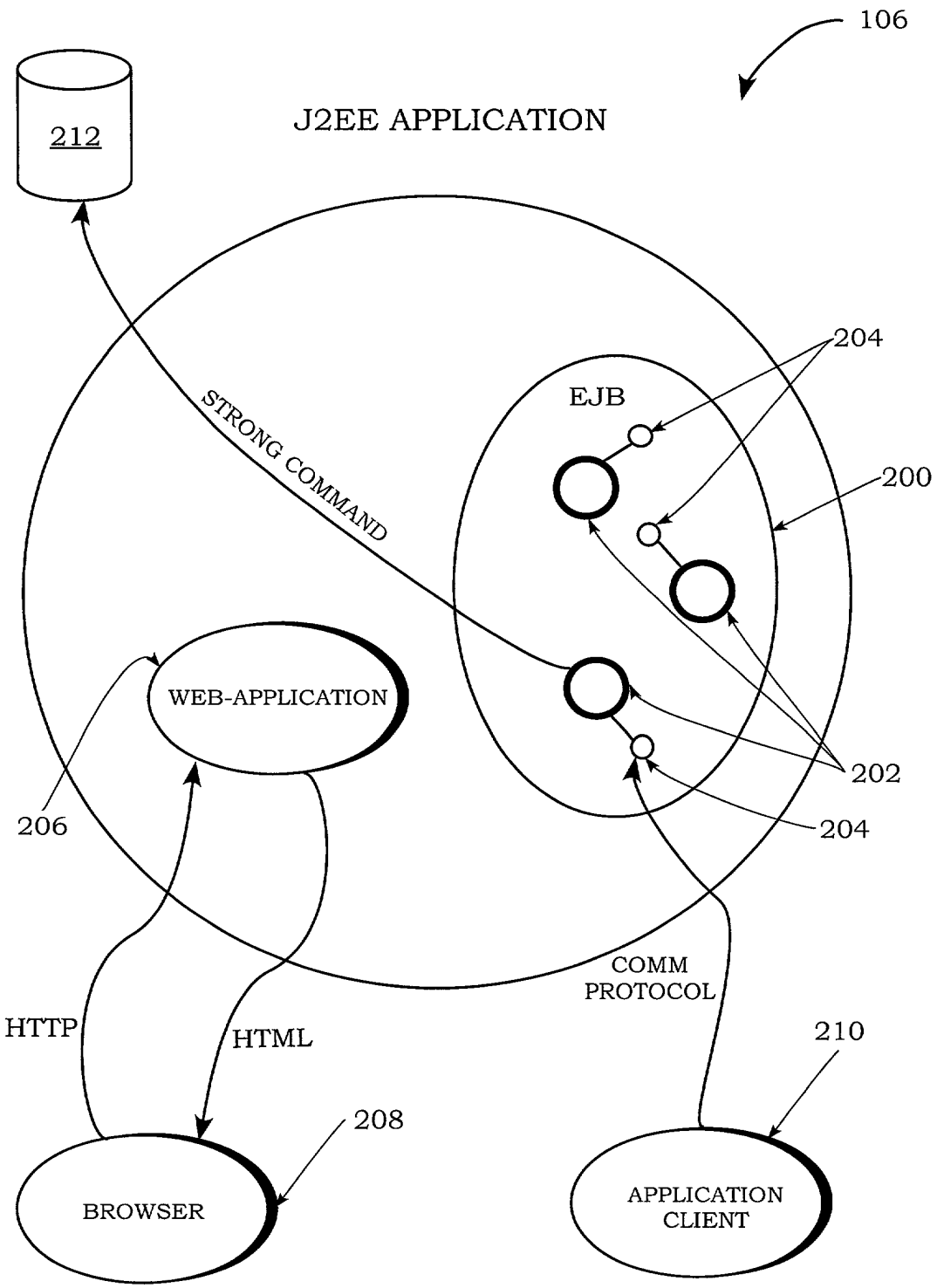

FIG. 2
(Prior Art)

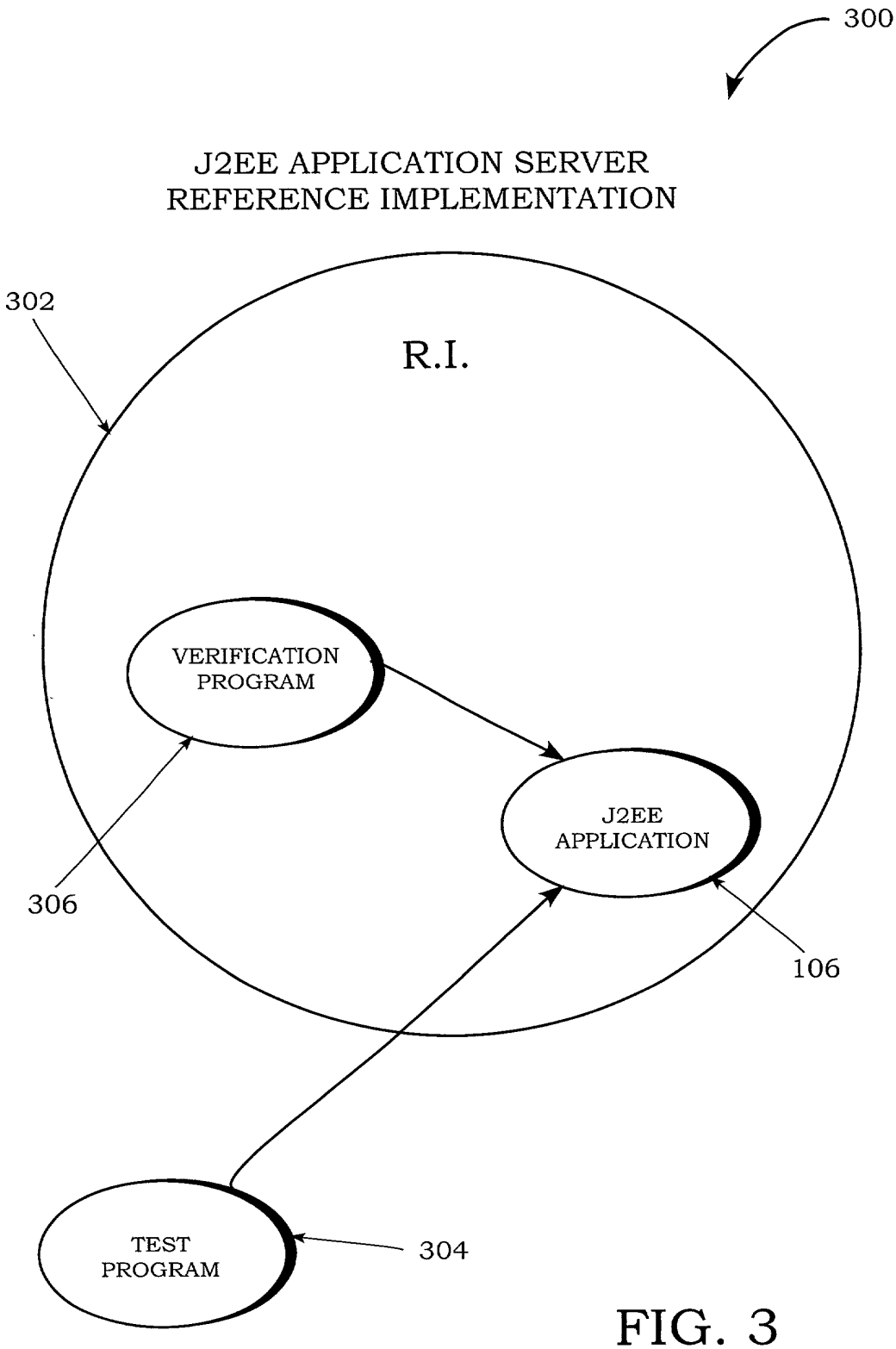
300
J2EE APPLICATION SERVER
REFERENCE IMPLEMENTATION
302
R.I.
VERIFICATION
PROGRAM
J2EE
APPLICATION
306
106
TEST
PROGRAM
304

FIG. 3

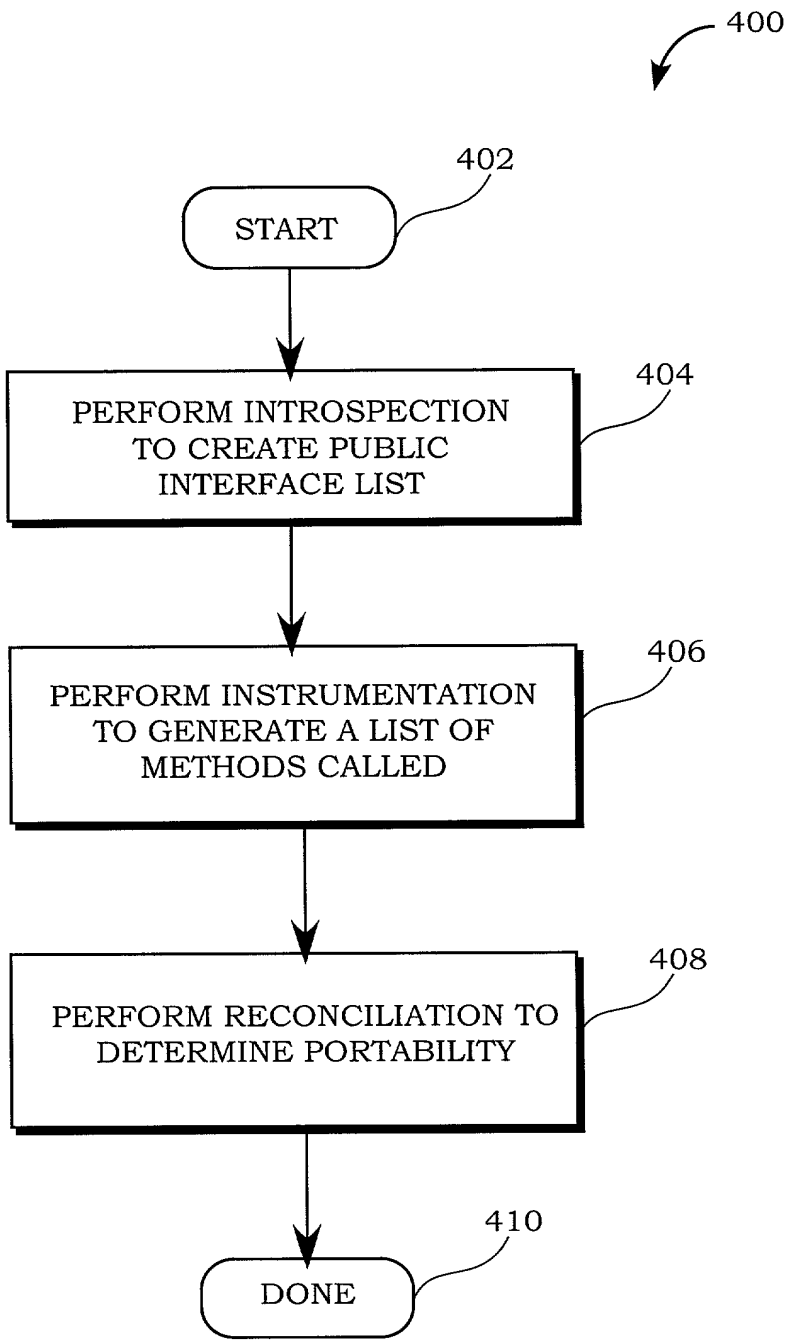
400
402
START
PERFORM INTROSPECTION TO CREATE PUBLIC INTERFACE LIST
404
PERFORM INSTRUMENTATION TO GENERATE A LIST OF METHODS CALLED
406
PERFORM RECONCILIATION TO DETERMINE PORTABILITY
408
DONE
410

FIG. 4

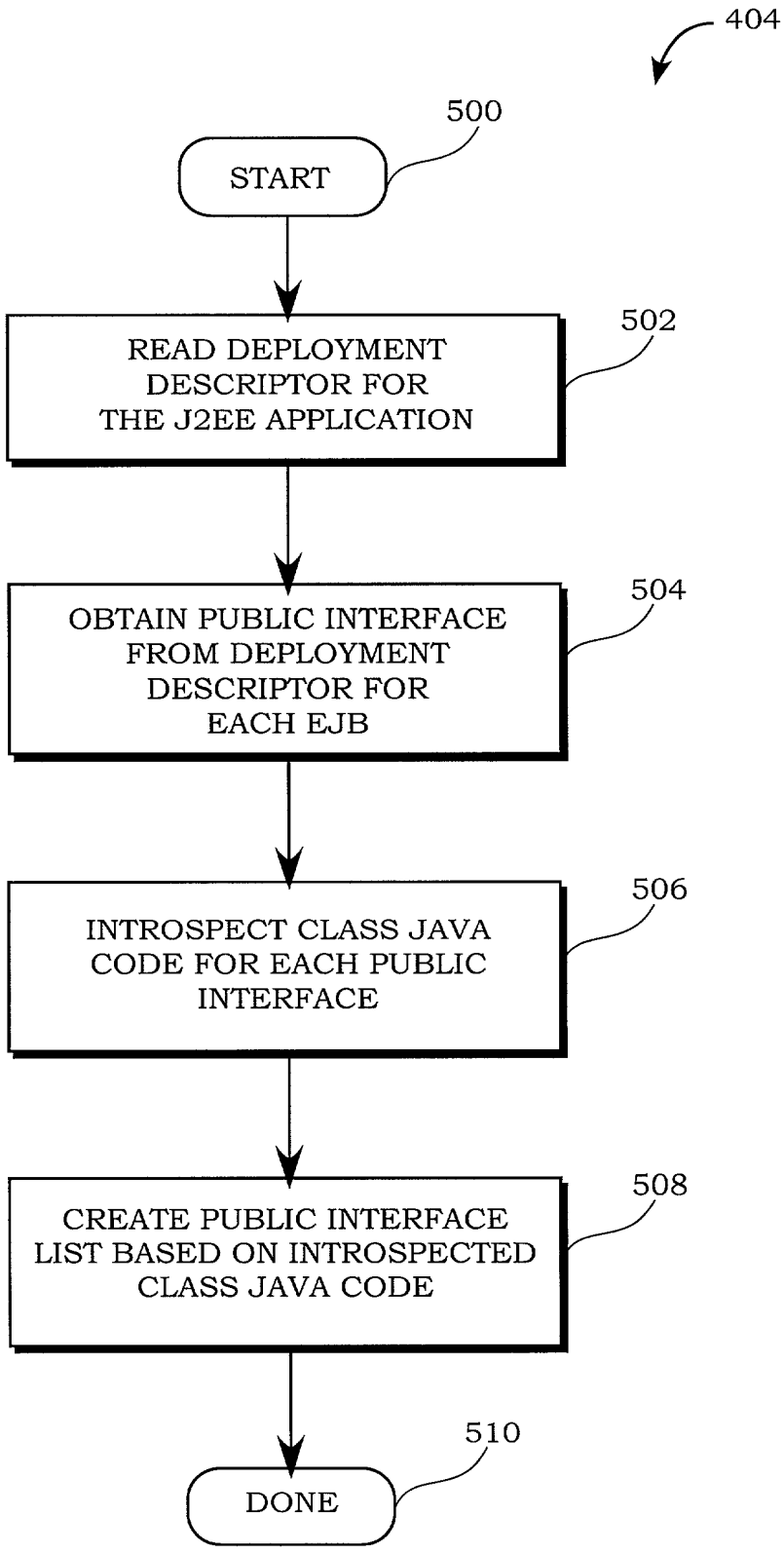
404
500
START
READ DEPLOYMENT DESCRIPTOR FOR THE J2EE APPLICATION
502
OBTAIN PUBLIC INTERFACE FROM DEPLOYMENT DESCRIPTOR FOR EACH EJB
504
INTROSPECT CLASS JAVA CODE FOR EACH PUBLIC INTERFACE
506
CREATE PUBLIC INTERFACE LIST BASED ON INTROSPECTED CLASS JAVA CODE
508
510
DONE

FIG. 5

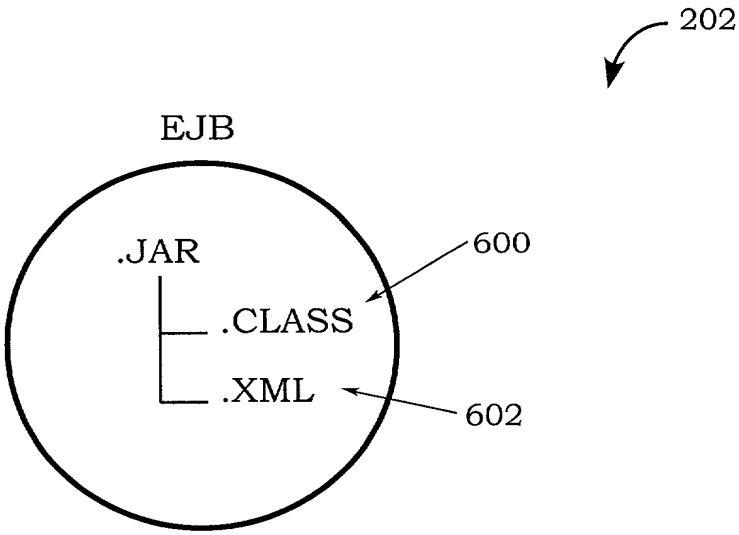
202
EJB
.JAR
600
.CLASS
.XML
602

FIG. 6A

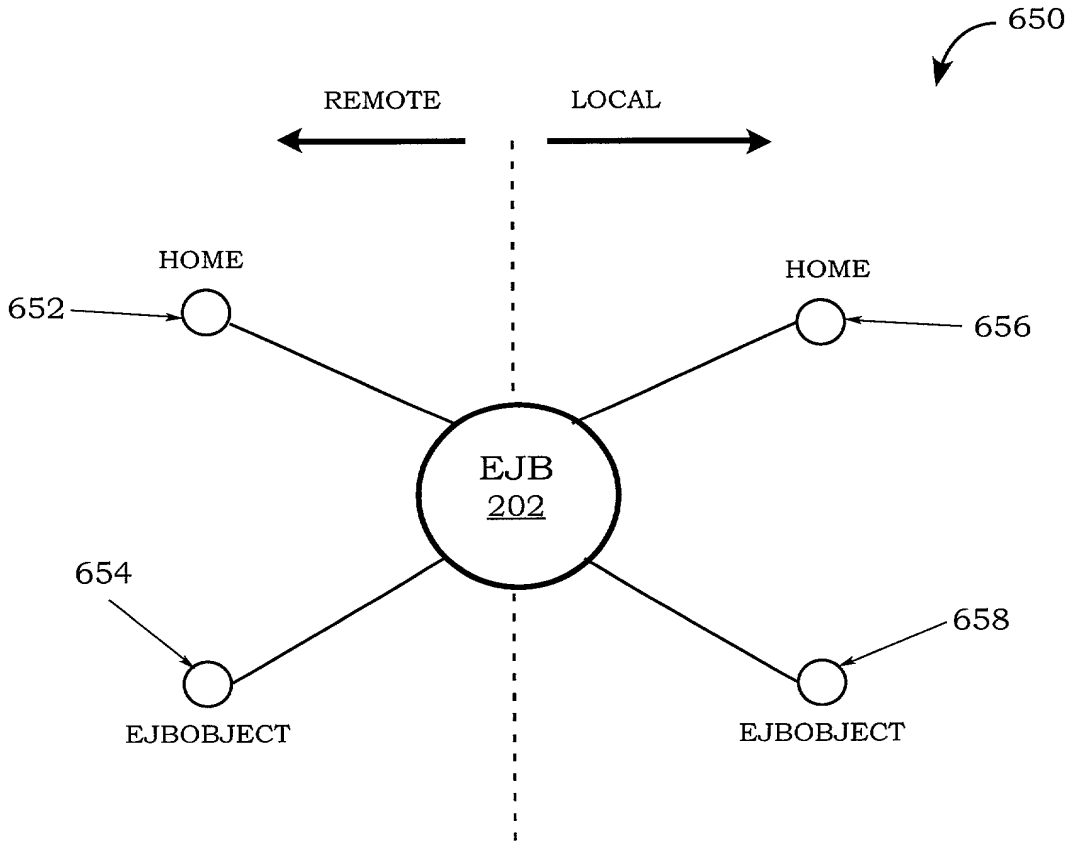
650
REMOTE
LOCAL
HOME
652
HOME
656
EJB
202
654
658
EJBOBJECT
EJBOBJECT

FIG. 6B

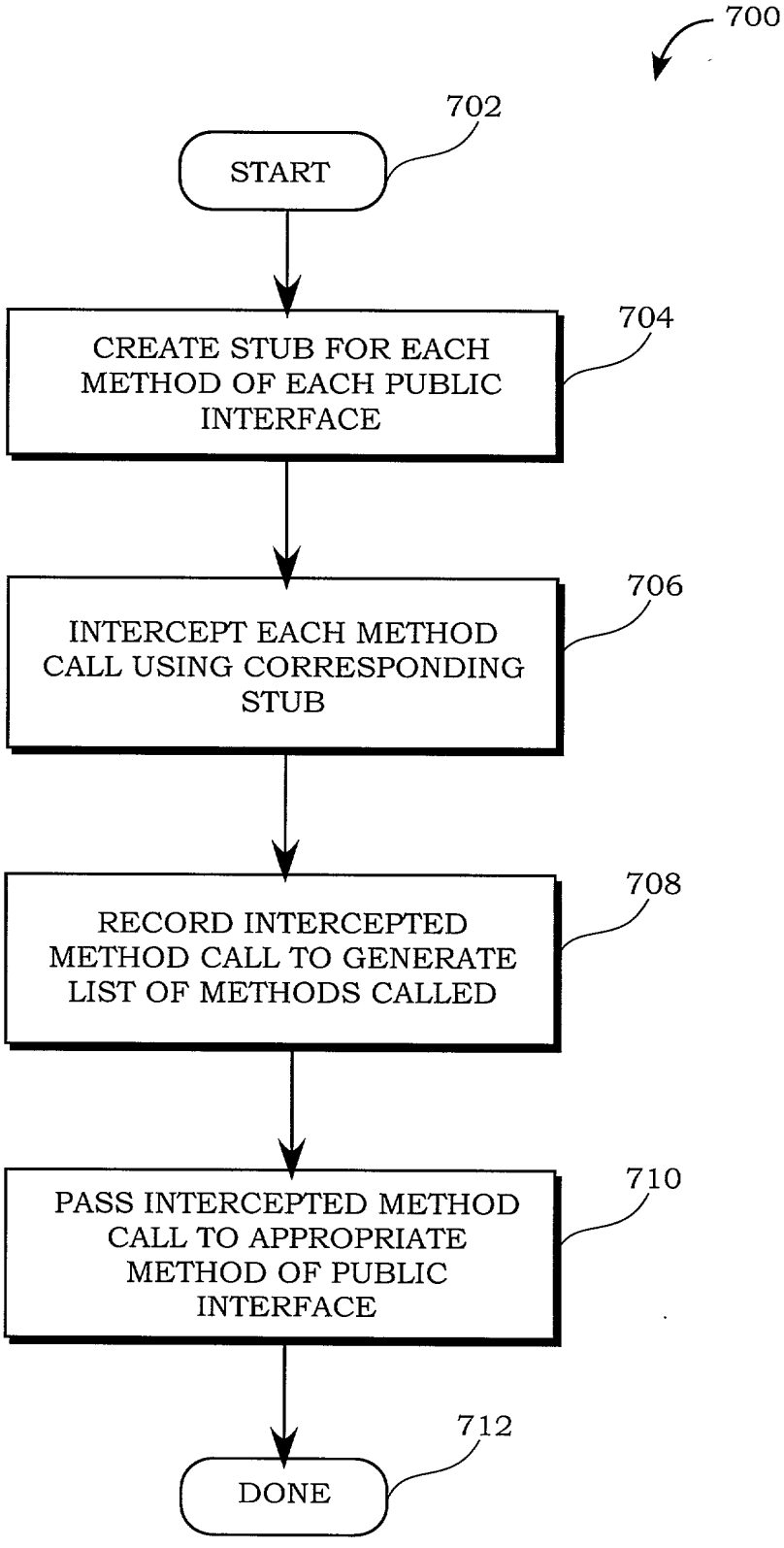
700
702
START
CREATE STUB FOR EACH METHOD OF EACH PUBLIC INTERFACE
704
INTERCEPT EACH METHOD CALL USING CORRESPONDING STUB
706
RECORD INTERCEPTED METHOD CALL TO GENERATE LIST OF METHODS CALLED
708
PASS INTERCEPTED METHOD CALL TO APPROPRIATE METHOD OF PUBLIC INTERFACE
710
DONE
712

FIG. 7

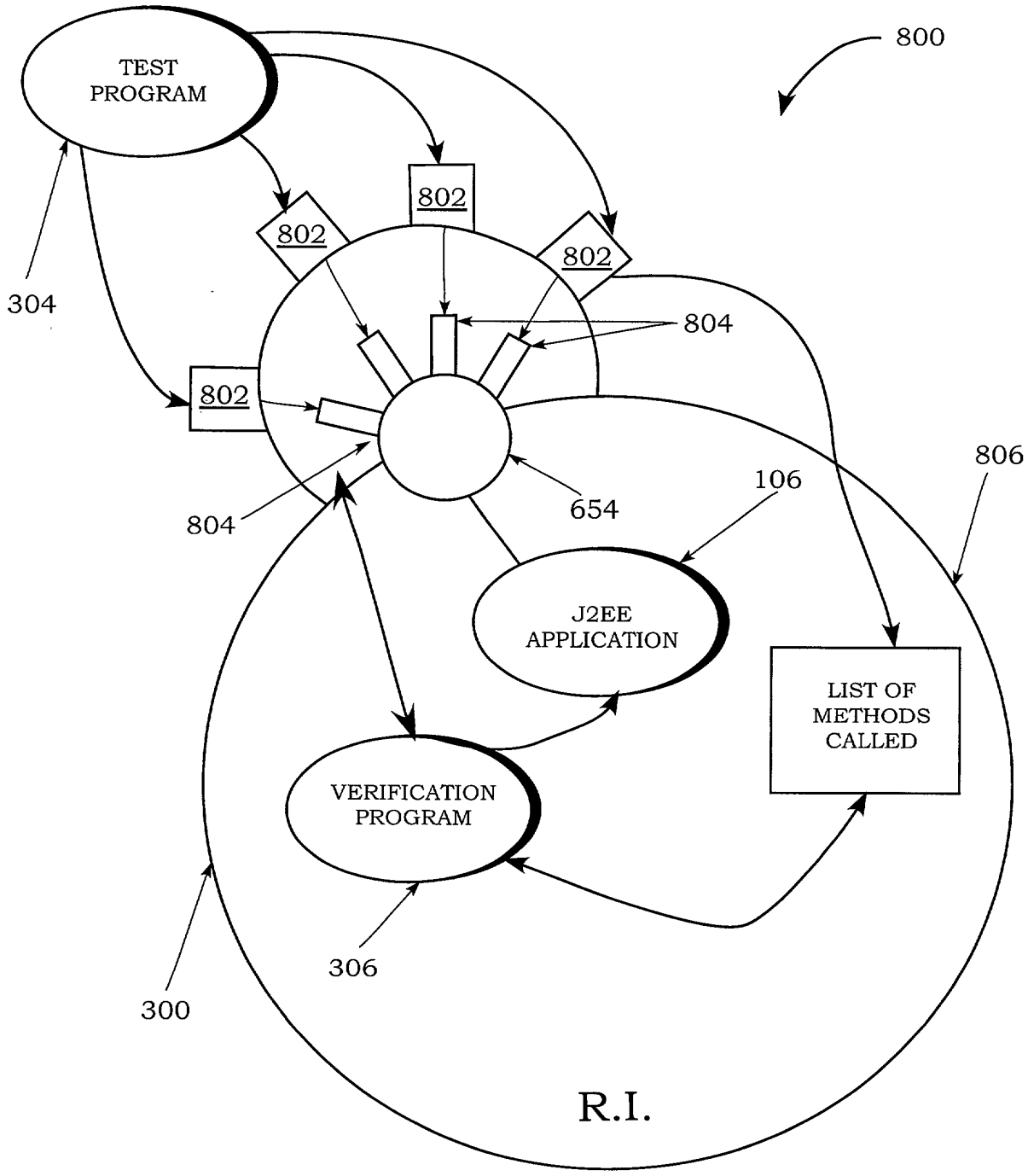
TEST PROGRAM
800
802
802
802
802
304
804
804
654
106
806
J2EE APPLICATION
LIST OF METHODS CALLED
VERIFICATION PROGRAM
306
300
R.I.

FIG. 8

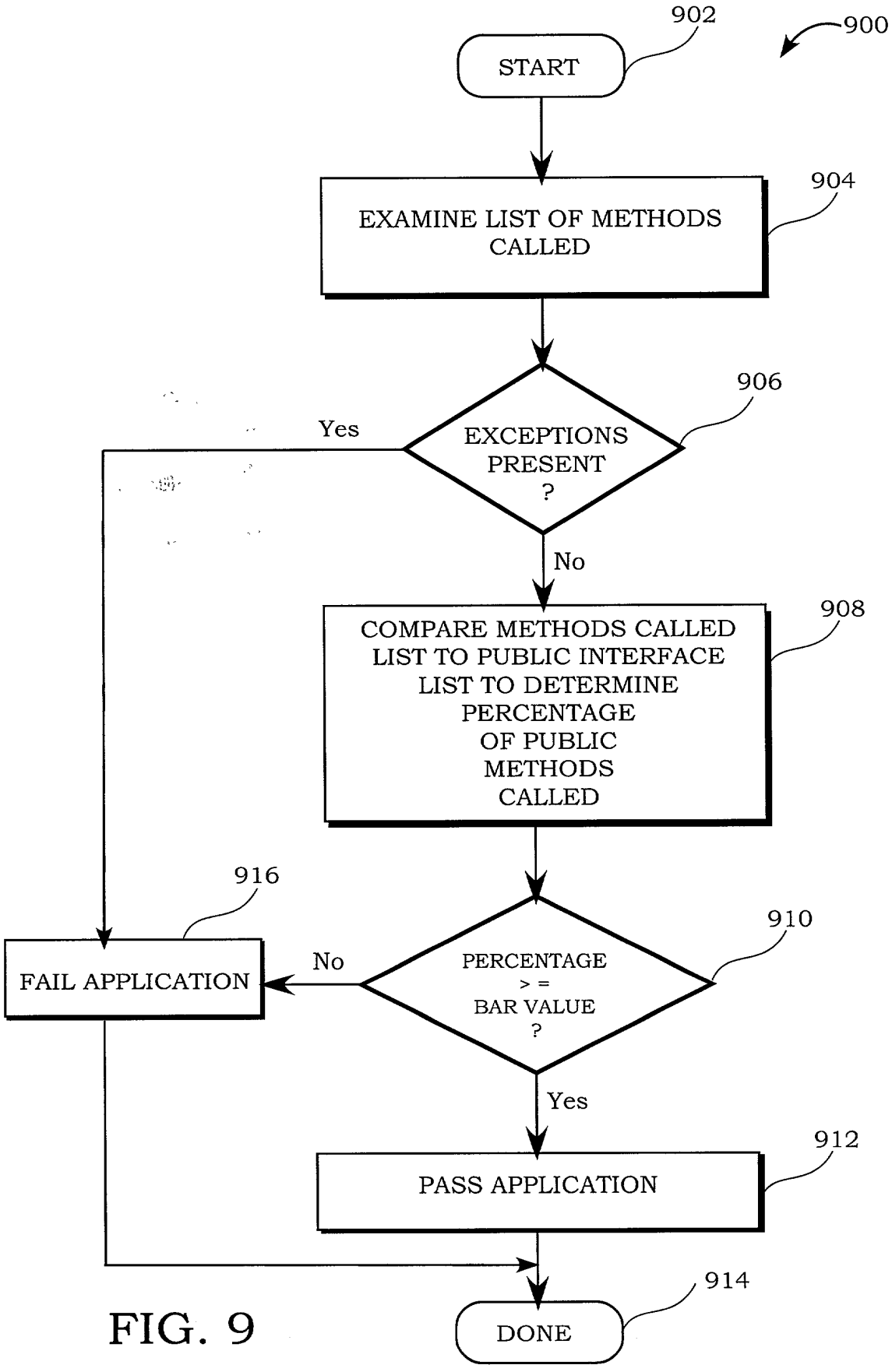
900
902
START
904
EXAMINE LIST OF METHODS CALLED
906
EXCEPTIONS PRESENT ?
Yes
No
908
COMPARE METHODS CALLED LIST TO PUBLIC INTERFACE LIST TO DETERMINE PERCENTAGE OF PUBLIC METHODS CALLED
910
PERCENTAGE > = BAR VALUE ?
No
916
FAIL APPLICATION
Yes
912
PASS APPLICATION
914
DONE

FIG. 9